

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

<p>NAVAJO NATION, a federally recognized Indian tribe, et al.,</p> <p style="text-align: center;">Plaintiffs,</p> <p>v.</p> <p>SAN JUAN COUNTY, a Utah governmental subdivision,</p> <p style="text-align: center;">Defendant.</p>	<div style="border: 1px solid black; padding: 10px; text-align: center; margin-bottom: 10px;"> FINAL REPORT OF BERNARD GROFMAN, SPECIAL MASTER </div> <p>Case No. 2:12-cv-00039-RJS-DBP</p> <p style="text-align: center;">Judge Robert J. Shelby</p> <p style="text-align: center;">Magistrate Judge Dustin B. Pead</p>
--	---

November 29, 2017

Bernard Grofman is Professor of Political Science and Jack W Peltason Endowed Chair of Democracy Studies at the University of California, Irvine, and former Director of the UCI Center for the Study of Democracy. His research deals with topics such as theories of representation (including minority voting rights and the comparative study of electoral rules and constitutional design), party competition, and behavioral social choice. He is co-author of five books (four from Cambridge University Press – including *Minority Representation and the Quest for Voting Equality*, and one from Yale University Press), and co-editor of 23 other books; with over 300 research articles and book chapters, including ten in the *American Political Science Review*. A member of the American Academy of Arts and Sciences since 2001, he has been a scholar-in-residence at universities and research centers in the U.S., Canada, France, Germany, Hungary, Italy, Japan, the Netherlands, Spain, and the UK, and he has an honorary Ph.D. from the University of Copenhagen, Denmark. In areas related to redistricting he has worked as a consultant or expert witness for the U.S. Department of Justice and federal courts, as well as both political parties, the NAACP Legal Defense, the Mexican-American Legal Defense Fund, and political subunits at both the state and local level, and has been involved in redistricting issues in a dozen different states. His research or expert witness testimony on redistricting has been cited in nearly a dozen U.S. Supreme Court cases over the course of the past four decades. In 2015, while serving as a Special Master for a three judge federal district court, he drew new court-ordered congressional districts for the State of Virginia that were used in the 2016 elections. In 2017 he won the Charles Merriam award, given biennially by the American Political Science Association for lifetime achievement in research applications in the area of public policy.

EXECUTIVE SUMMARY

Submitted to the Court along with this Report are my recommended maps for the San Juan Utah County Commission, and for the San Juan County School Board. These are based on my own *de novo* line drawing since recommending maps that I drew allows me to be clear about both the process and the outcome aspects of each of the recommended maps. In particular, I was able to draw maps where there was no possibility that race had been a preponderant motive. In my view, each of these maps can be used as a remedy of the Constitutional infirmity found by this Court, namely a violation of the “equal protection” test laid out in *Shaw v. Reno*, 509 U.S. 630 (1993) and subsequent Supreme Court cases. The recommended map for the County Commission, plan D, is an improved version of my preliminary conceptual map for the County Commission, plan C, whose details were presented in my preliminary report. The recommended map for the School Board, plan SB3, is an improved version of my preliminary conceptual map for the School Board, plan SB2, whose details were presented in my preliminary report. Because I have already discussed the background of this case, and provided basic demographic and geographic information about the county in my Preliminary Report, as well as describing therein my previous formulations of possible conceptual maps, I will not repeat that data or those descriptions here, though at the end of this Report there is an ERRATA section correcting three errors in that Preliminary Report. None of these errors affected the accuracy of the discussion of the conceptual maps contained in that Preliminary Report.

The maps I have drawn are based on census blocks and other units of census geography, which are the only units of geography for which we have reliable population estimates, and the districts drawn involve contiguous geographic units. The proposed plans are drawn from a good government perspective in which race was not a preponderant motive. In these plans, in addition to maintaining population equality, the priority was to retain intact to the extent feasible existing population concentrations, including cities and census places, and to avoid drawing districts (such as the one proposed by the County for the County Commission in its rejected remedial plan) that stretched from one corner of the County (SW) to another corner of the County (NE). In particular, the only city or census place that was divided in two pieces was

the City of Blanding, and that city was also split in two pieces in the County's previously submitted County Commission and in the County's previously submitted School Board plans. Moreover, in contrast to the Plaintiff's proposed School Board Plan, which splits the City of Blanding in three pieces, SB3 only splits the city of Blanding in two pieces, and such a split is mathematically mandated by the population size of the city relative to the ideal size of a School Board district. Also, plan CC D splits the Navajo Nation in only two parts, while plan SB 3 splits it into only three parts, the number that is mathematically necessary because the Navajo Nation's population is larger than twice the population of an ideally sized School Board district.

I also sought to draw on additional good government considerations in drawing the School Board districts. In particular, in line with the County's stated desire for Community based assignments, each school board district contains at least one of the County's schools, and none contain more than four, and each of the four largest high schools in the county is placed in a separate school board district. The distribution of schools to districts is essentially the same as in the County's School Board plan. Thanks to Superintendent Ron Nielson, I was also given information about the bus routes used to bring students from outlying areas to the various schools, and I sought to make use of that information to the extent feasible, but priority to constitutional and statutory requirements such as equal population made it impossible for me to fully mesh school pupil catchment areas with School Board districts. Nonetheless I was able to draw a Northern school board district that placed both La Sal and Monticello in the same district, since La Sal students go to the Monticello high school, and to draw a district that included the schools in the western portion of the Navajo Nation in a way that included their pupil catchment areas.

The revisions to the earlier conceptual maps made in my final recommended maps for the County Commission and the School Board draw on suggestions from the parties and from the public, as presented in public hearings in Monticello and in Bluff held on November 16 and subsequent written comments filed by e-mail on the Court website in the several days following. As a student of American government and of democracy worldwide, I was pleased to be able to attend these hearings and to witness the high level of citizen involvement they reflect. The comments and submissions that were most useful were those in the form of what I

have, in previous research, labeled as “feasibly mappable” suggestions, i.e., suggestions for changes that are sufficiently explicit about how particular pieces of geography should be treated that it is possible to determine if/how they could be implemented. However, because of the need to balance off multiple competing criteria for line drawing, and giving priority to factors that are constitutionally or statutorily mandated, not all suggestions could be implemented in the final proposed maps. (In the body of the report I discuss the feasibly mappable suggestions and how they were dealt with in the final proposed maps).

In the past, those who live outside cities and have Post Box addresses have been requested to point at a map to identify where they live so that they could be given the correct ballot. Because ideal County Commission population is exactly one third of the total county population while ideal School Board district size is less than one fifth of the County population since it excludes the population of Spanish Valley (which is now part of the Moab School District), this numerical incompatibility means that there is no way to make the boundaries of the School Board districts and the County Commission districts coincide perfectly. Nonetheless, in the revised plans, I was able to redraw SB2 lines so as to place SB3 District 1 entirely within CC-D District 1 and SB3 District 4 entirely within CC-D District 3.

The avoidance of splitting of any census places, including the newly incorporated area of Blanding, and keeping intact the City of Monticello, and using a similar allocation of blocks within the City of Blanding for both the County Commission and the School Board plans, will further facilitate the ability of voters to identify the districts in which they live, and to be appropriately assigned to new precincts, since (according to the 2010 census) 9009 of the County’s 14746 inhabitants (61%) live in one of these areas. In addition, to the extent feasible, the School Board districts and County Commission districts that contain territory within the Navajo Nation respect Navajo chapter unit boundaries. Thus, for the unincorporated areas that are within the Navajo Nation, home locations may be identifiable in terms of chapter boundaries within the Navajo Nation, as well as by proximity to census places.

Initial line drawing was on the basis of population and preservation of city and census geography. In my line drawing, racial considerations entered only at the next to last stage, and

only in a minimal fashion so to avoid a potential constitutional violation of the Equal Protection clause or a violation of Section 2 of the Voting Rights Act of 1965 (as subsequently amended) in terms of packing. In particular, racial considerations entered only in the form of adjusting boundaries in initial conceptual maps by moving population between two contiguous districts each of which already had a majority Navajo citizen voting age population in such a fashion as to insure that neither of these districts exceeded a 90% Navajo American voting age majority.

In these plans, incumbency considerations in the form of avoiding pairing two incumbents in the same district entered only as the final stage, and was done in a fashion that did not affect the plan's fundamental reliance on good government standards and the overriding importance of constitutional standards such as one person, one vote. However, the maps that avoid pairing of incumbents are marginally less compact than precursor maps. To the best of my knowledge, the revised County commission and School Boards maps discussed in this Report do not pair any incumbents.

Pursuant to the instructions I receive from the Court, final plans will be created for the County Commission and the School Board to be used in the next election. Because the boundaries of present districts and proposed districts overlap, it is necessary to have an election for all seats in 2018; to do otherwise would create confusion as to which representative represented which voters. However, because the County makes use of staggered elections, and these can be justified in good government terms as providing continuity across elections, my recommendation is to retain the staggered feature of elections by holding the 2018 elections for all seats, but to have the duration of remaining office in each district match those for the present districts (with the matching to be determined by present incumbent home location).

REPORT OF THE SPECIAL MASTER

1. *recommended maps*

(a) Submitted to the Court along with this Report are my recommended maps for the San Juan Utah County Commission, and for the San Juan County School Board. In my view, each of these can be used as a remedy of the Constitutional infirmity found by this Court, namely a violation of the “equal protection” test laid out in *Shaw v. Reno*. 509 U.S. 630 (1993) and subsequent Supreme Court cases. The recommended map for the County Commission, plan D, is an improved version of my preliminary conceptual map for the County Commission, plan C, whose details were presented in my preliminary report. The recommended map for the School Board, plan SB3, is an improved version of my preliminary conceptual map for the School Board, plan SB2, whose details were presented in my preliminary report. These proposed maps are based on my own *de novo* line drawing since recommending maps that I drew allows me to be clear about both the process and the outcome aspects of each of the recommended maps. In particular, I was able to draw maps where there was no possibility that race had been a preponderant motive.¹

¹ Because I have already discussed the background of this case, and provided basic demographic and geographic information about the county in my Preliminary Report, as well as describing therein my previous formulations of possible conceptual maps, I will not repeat that data or those descriptions here, though at the end of this Report there is an ERRATUM section correcting three errors in that Preliminary Report. None of these errors affected the accuracy of the discussion of the conceptual maps contained in that Preliminary Report.

(b) The basic demography of the recommended maps is shown below:²

CC Plan D

District	Total Population	Native Am Population	Percent Native Am	Native Am +18 Percentage	Blanding
(District 1)	4,916	544	11.1%	10.6%	1172
(District 2)	4,917	3,224	65.6%	63.4%	2102
(District 3)	4,913	3,925	79.9%	78.0%	0

SB 3

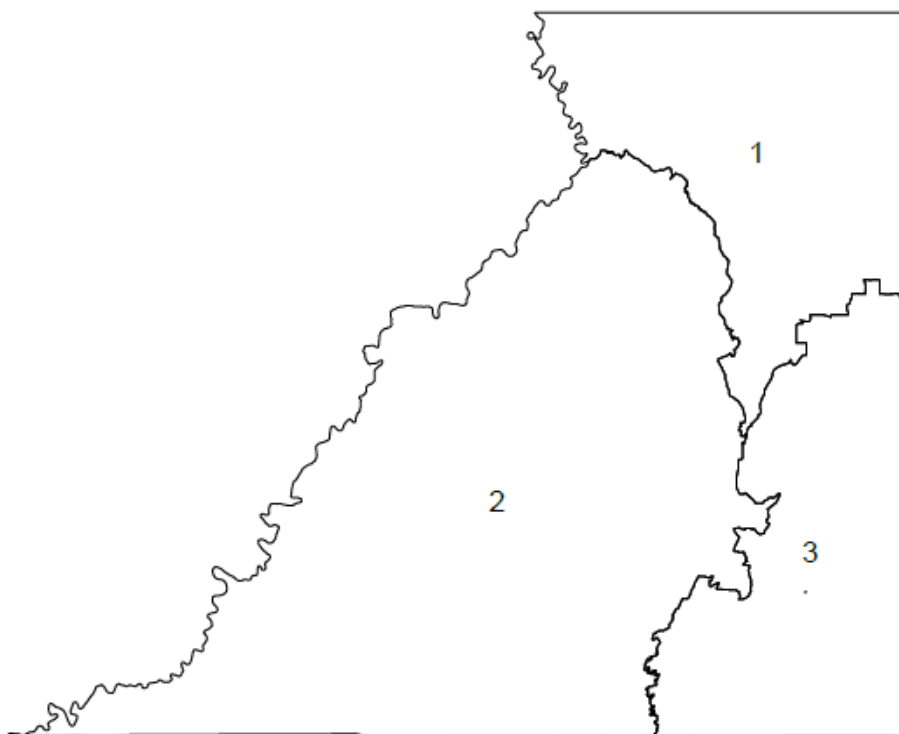
District	Total Population	Native Am Population	Percent Native Am	Native Am +18 Percentage	Blanding
(District 1)	2,851	175	6.1%	5.5%	0
(District 2)	2,852	706	24.8%	24.2%	2,126
(District 3)	2,850	1,855	65.1%	64.4%	1,148
(District 4)	2,854	2,437	85.4%	83.6%	0
(District 5)	2,852	2,504	87.8%	84.2%	0

Native Am +18 Percentage includes those who identify as Native American alone or in combination with one other racial group. (only 4 residents in SJC identify with more than two racial groups)

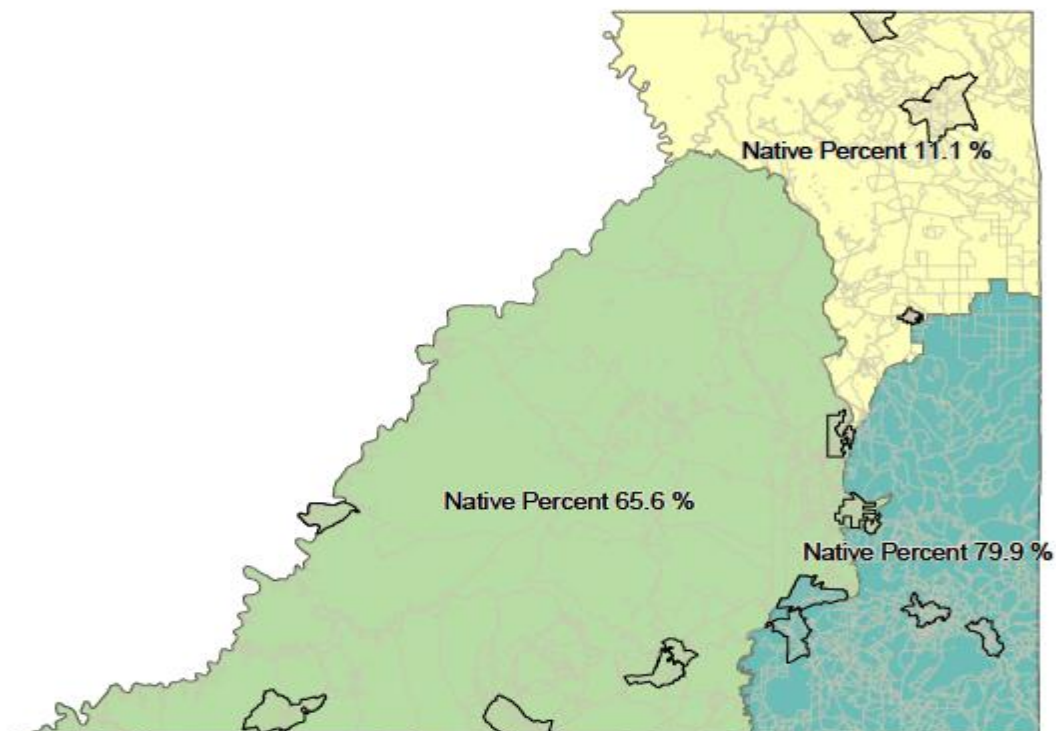
(c) Maps for the two plans are shown below.

² Because Native Americans are U.S. citizens I will use Native American voting age population and Native American citizen voting age population synonymously.

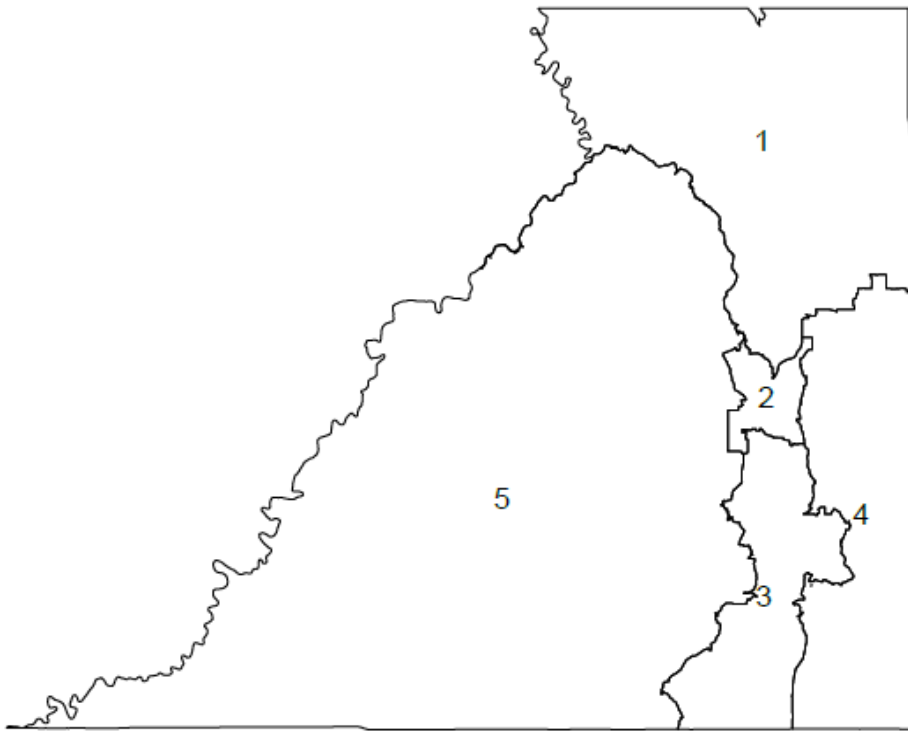
CC Conceptual CC_D



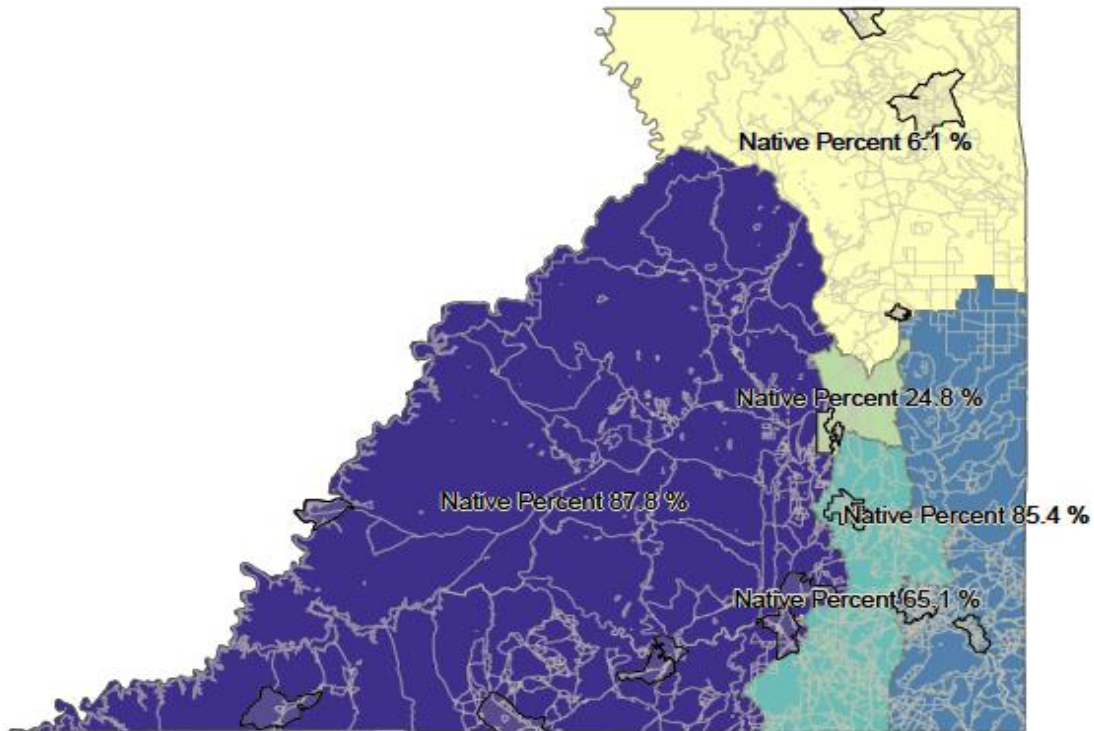
Conceptual Plan CC_D



CC Conceptual SB_3



Conceptual Plan SB_3



2. *preponderant motive*

(a) Because the finding of a constitutional infirmity in both past and present County plans hinged on the use of race as a preponderant factor, I have been especially attentive to this consideration. In particular, all my line drawing has been based almost entirely on geographic features such as cities and populated census places and total population features of the County, and race is not a preponderant criterion in either of the maps I drew. The two maps I have drawn are based on contiguous census blocks and other units of census geography, which are the only units of geography for which we have reliable population estimates. These maps all reflect as their dominant motivation good government criteria and are drawn based on the geography and population demography of the County, with attention to the location of schools in the case of the School Board plans, and with attention to population concentrations. In particular, CC-D, that I propose for the County Commission, keeps whole the City of Monticello and keeps whole all census places in the County, and divides the City of Blanding in only two pieces and divides the Navajo Nation in only two pieces. In contrast, the Commission map drawn by the County, while it also splits Blanding in two parts, unnecessarily splits the Navajo Nation in three parts. SB3 similarly keeps whole the City of Monticello, and keep whole all census places in the County, and divides the City of Blanding in only the two pieces that are mathematically required by the fact that the city's population exceeds that of an ideally sized School Board district, and divides the Navajo Nation in only the three pieces that are mathematically required given the fact that the Navajo Nation's population exceeds that of two ideally sized School districts.

(b) Initial line drawing was on the basis of population and preservation of city and census geography. In my line drawing, racial considerations entered only at the next to last stage, and only in a minimal fashion so to avoid a potential constitutional violation of the Equal Protection clause or a violation of Section 2 of the Voting Rights Act of 1965 (as subsequently amended). In particular, racial considerations entered only in the form of adjusting boundaries in initial conceptual maps to mitigate packing of minority populations by moving population between two contiguous districts each of which already had a majority Navajo citizen voting age population in such a fashion as to insure that neither of these districts exceeded a 90% Navajo citizen voting age majority.

3. Navajo Chapter boundaries

To the extent feasible, the School Board districts in SB3 and the County Commission districts in CC-D that contain territory within the Navajo Nation respect Navajo Chapter unit boundaries (units of tribal structure). However, the size of the Aneth chapter (1995 people), combined with geographic factors, made it impossible to place in whole within single School Board district. It is kept whole within County Commission map D for the County Commission. I am indebted to Navajo Nation representatives for calling my attention to these Chapter boundaries. While they had been submitted in earlier filings that predated my involvement as Special Master I was not aware of these Chapter boundaries in drawing the Conceptual Maps described in my Preliminary Report. Taking Chapter boundaries into account to the extent feasible required only trivial population shifts in my previous conceptual maps, since these earlier conceptual maps

were already based on keeping whole census places within the Navajo Nation in exactly the same way that I kept whole census places elsewhere within the County.³

4. *city splits*

(a) In SAN JUAN COUNTY'S OBJECTION TO SPECIAL MASTER'S CONCEPTUAL REMEDIAL PLANS Filed 11/17/17 (Case 2:12-cv-00039-RJS-DBP Document 424, p. 11) the County now asserts that it is inappropriate for the Court to consider plans that split the City of Blanding. "The Special Masters' proposed plans fail to respect traditional communities of interest within the County by dramatically splitting Blanding, the County's largest and most diverse city."⁴ The County's own Remedial Plan for the County Commission splits the City of Blanding in two pieces, though one of these pieces is very close to zero population (8 persons); however, the County's own Remedial Plan for the School Board, which necessarily must split the City of Blanding, does so by making the split in two large pieces, one of 1,891 persons and one of 1,383 persons. Moreover, the way in which the County achieved preserving the near unity of the City of

³ In particular, PLAINTIFF'S COMMENTS ON SPECIAL MASTER'S CONCEPTUAL PLANS, filed 11/17/17 Case 2:12-cv-00039-RJS-DBP Document 423, p. 3 notes that one census block (Block 490379421001006) in District Three in conceptual map CC C is detached from the rest of the Dennehotso Chapter, which for the most part is assigned to District Two. Plaintiffs proposed that this one census block, along with two adjacent zero population blocks, should be reassigned to District Two. This was a straightforward and good government oriented suggestion that could easily be implemented, and I have made this change in proposed map CC-D.

⁴ The view that Blanding should be kept whole within a single County Commission seat was also very strongly supported in a proclamation of the Blanding City Council that was provided to the Court.

Blanding in its County Commission plan was to construct another district that joins population at the very southwestern edge of the County with population to the North of Blanding at the northeastern edge of the County.

(b) In discussing feasible Conceptual Maps with the Court I had considered ones which kept Blanding in one piece but found that the only plans which did so had flaws that made me unable to recommend them to the Court. Either they had a problem similar to what is found in the County's Commission plan of creating an ungainly district stretching diagonally between one corner of the County and another opposite corner; and/or they put Monticello in the same district as Blanding in a way which, for population reasons, forced the City of Monticello, rather than the City of Blanding, to be split into two pieces; or, like the County's own County Commission plan, they unnecessarily split the Navajo Nation in three pieces rather than the only two pieces that were mathematically necessitated.

5. use of census geography

(a) As noted above and in my Preliminary Report, the maps I have drawn are based on census blocks and other units of census geography, which are the only units of geography for which we have reliable population estimates.⁵ In SAN JUAN COUNTY'S OBJECTION TO SPECIAL MASTER'S

⁵ I recognize the potential relevance of assertions made in comments submitted after the Public Hearings to the effect that San Juan County is thought to have experienced population growth, and/or might have experienced census errors in assigning the homes of Native Americans to the area where they got mail that was outside County boundaries, thus rendering 2010 census estimates either stale and estimates of Native American population too low. I have no way in judging the accuracy of this latter claim. In any case, in a Court drawn plan, even one coming toward the end of the decadal redistricting period, there is no alternative to using

CONCEPTUAL REMEDIAL PLANS Filed 11/17/17 (Case 2:12-cv-00039-RJS-DBP Document 424, pp. 7-9) the County repeats mistaken arguments discussed in my Preliminary Report and appears confused about the nature and role of precincts.

(b) As I noted in my Preliminary Report, precincts are units of administrative convenience. As left unchanged by the County across multiple censuses, they have become units of administrative inconvenience, frustrating the ability to draw constitutional maps after each decennial census. Contrary to the County's assertion, they are normally redrawn to the extent necessary after each decennial round of redistricting to better reflect the units of geography contained in the different districts and to allow for population counts reflecting the most recent census. That should have been done after new district boundaries were drawn after the 2010 Census (or even earlier). The problem is not, as the County alleges, that census blocks split precinct lines; the problems is the exact opposite, that the County's present precinct lines split census units.

(c) The County also seems to be under the impression that basing map drawing on census blocks and other units of census geography means that each census block is going to be a precinct. Of course, that is wrong. Rather, census blocks will be grouped into precincts by the County in order to best facilitate the implementation of the new district lines. In short, the new precinct lines will facilitate the County's electoral processes in exactly the same way as did the old ones, but now with population counts within units of geography able to be accurately

2010 Census data. Even though there are updated census projections for the County as a whole based on surveys, data is simply not available at the level of geography needed for redistricting purposes, and the measurement error in these survey instruments is larger than is the case for the actual census. The 2010 Census is the "gold standard" for redistricting purposes, even while its limitations as only a "population snapshot" are well recognized.

tallied so as to optimize the determination of precinct boundaries more nearly containing equal numbers of voters.⁶ Moreover, the new precinct lines should be such as to include whole units of census geography such as places, except insofar as the population in these units requires them to be split among multiple precincts.⁷

(d) In SAN JUAN COUNTY’S OBJECTION TO SPECIAL MASTER’S CONCEPTUAL REMEDIAL PLANS Filed 11/17/17 (Case 2:12-cv-00039-RJS-DBP Document 424) the County asserts the claim that, “because census blocks are drawn differently with each census, any redistricting following the 2020 census would require the same or similar labor intensive effort to in effect identify and re-register voters.” That assertion is wrong. Census units are generally quite durable, and are revised only (a) when there is population growth that requires the splitting of an existing unit of

⁶ One respondent to the e-mail addressed posted by the Court and announced at the Public Hearings suggested that P.O Box addresses would be useful as a basis for districting; another suggested that some San Juan County residents who lived near a border with another county or another state collected their mail outside the county and so P.O. Boxes could not be used. I have no knowledge of the truth of the latter claim, but I can say that relying entirely on P.O. Box addresses would make it essentially impossible to do the necessary population balancing across districts. (While I did name authors of suggestions when these came from public officials or came from a party directly involved in the litigation, or are otherwise clear from context, here I preserve the anonymity of the respondents.)

⁷ In SAN JUAN COUNTY’S OBJECTION TO SPECIAL MASTER’S CONCEPTUAL REMEDIAL PLANS Filed 11/17/17 (Case 2:12-cv-00039-RJS-DBP Document 424, pp. p. 8) the mail-in registration procedures are described. “On each form, the voter lists their mailing address as a P.O. Box, and then goes on to identify/describe their physical address in general terms such as 20 miles west of La Sal Creek, 29 Highway 275 at end of road, East Bolder, Highway 262 Aneth, 18 miles from Cahone Mesa, 6 miles northeast of County Road 444, and 3/2 of a mile northeast of Old Aneth Road. Based upon such physical descriptions of the location of their homes, the San Juan County Clerk’s Office is able to place these voters into their proper precinct.” Here I would simply note that the procedure will be exactly the same under new precinct lines drawn by the County based on census blocks and other units of census geography. The County must match voter location descriptions to locations on a map that shows the new precinct boundaries.

census geography, or the new designation of a larger unit such as a census place; (b) when other population or incorporation shifts take place, such as demographic shifts that suggest the need to reconceptualize the boundaries of a standard metropolitan area that extends beyond a highly urban central city. Also, the County seems unaware that it can work with state authorities and with the Census, prior to the 2020 enumeration, so as to help insure that census geography boundaries reflect the “on the ground” realities in the County.

(e) I am aware that it will be necessary for individuals to be reassigned to the new precincts that will be created by the County. I am also aware that, in large portions of the County, individuals use Post Box designations as their address of convenience. And I am further aware that, in the past, and for new residents, those who live outside city boundaries and have only Post Box addresses have been requested to point at a map to identify where they live so that they could be assigned to a precinct and given the correct ballot. I have taken these facts into account in the maps that I have drawn. The features of the maps I have drawn (and ones that I would expect to find in any future plans drawn along good government lines) facilitate voter identification and matching of their home location to precinct boundaries.

i. Once the County has created its new precincts, identification by voters of the precinct in which they live will be greatly facilitated by the way in which CC-D and SB3 are based on whole census places, and the whole City of Monticello, and a similar division of population within the City of Blanding in both the School Board and the County Commission plan, since these units already include 61% of the County’s population. Moreover, conversion to new precinct lines will be facilitated by other features of my map drawing such as the degree to which the

proposed maps make use of Chapter boundaries within the Navajo Nation—boundaries that are generally known to those living within its borders.

ii. Conversion to new precinct lines will be further facilitated by the extent to which there is a coterminality of School Board and County Commission lines in my proposed maps. Because ideal County Commission population is exactly one third of the total county population, while ideal School Board district size is less than one fifth of the County population since it excludes the population of Spanish Valley (which is now part of the Moab School District), this numerical incompatibility means that it is mathematically impossible to make the boundaries of the School Board districts and the County Commission districts coincide perfectly. Nonetheless, in the proposed plans that revise my earlier conceptual maps, I was able to redraw SB2 lines so as to place SB3 District 1 entirely within CC-D District 1 and SB3 District 4 entirely within CC-D District 3.⁸ This simplifies ballot preparation by limiting the number of distinct ballot types that must be prepared and might allow the County to make SB 3 District 1 a precinct, and SB3 District 4 a precinct. Also, Spanish Valley could be a precinct, since it is whole within one of the County Commission districts in CC-D but is not part of the County school system.⁹

⁸ PLAINTIFF'S COMMENTS ON SPECIAL MASTER'S CONCEPTUAL PLANS, filed 11/17/17 Case 2:12-cv-00039-RJS-DBP Document 423, p. 3 suggested the desirability of more closely aligning the division of the City of Blanding in any adopted County Commission map with the division of the City of Blanding in any adopted School Board map. This is a sensible and good government suggestion that could be readily (though not perfectly) implemented, and I have attempted to comply with the spirit of that suggestion in recommended maps CC-D and SB3.

⁹ In redrawing conceptual maps SB2 and CC-C to become SB3 and CC-D, I sought to increase the coincidence of School Board and County Commission lines to the extent feasible given other constraints, and recognizing the mathematic impossibility of having perfect coincidence when School Board district idea size is 2582 and ideal County Commission size is 4915. The coterminality of School Board and County Commission lines in my proposed maps is now

6. use of school pupil catchment areas

Thanks to Superintendent Ron Nielson, I was given information not just about school locations and enrollments but also about the bus routes used to bring students from outlying areas to the various schools, and I sought to make use of that information to the extent feasible. In particular, I was able to draw a Northern school board district that placed both La Sal and Monticello in the same district, since La Sal students go to the Monticello high school, and to draw districts that included areas around each of the other large high schools. Given the geography, I was able to draw a district with the western portion of the Navajo Nation in it in a way that included the pupil catchment areas for most schools in the district, and to draw a district in the eastern portion of the Navajo nation that included much of that district's schools' pupil catchment areas. In the revisions to conceptual map SB2 that became proposed plan SB3, I did seek to improve this fit, but could only make very small changes. The priority that needed to be accorded to constitutional and statutory requirements, such as equal population, made it impossible for me to fully mesh all school pupil catchment areas with School Board districts. For example, while I did incorporate pupil catchment areas north of the high school in Monticello

slightly greater than what is found in the remedial plans proposed by the County in terms of overlapping populations. Moreover, there are two School Board District entirely contained with a County Commission district in SB3 and CC-D while there is only one such inclusion in the County's School Board and County Commission maps. Furthermore, in the County's maps, there are two School Board districts that are split across all three of the County Commission districts, while there is only one such School Board district in proposed plans SB3 and CC-D.

into the same school board district as the City of Monticello, I was not able to fully capture in the same district pupil catchment areas for that school to the south and east of Monticello.

7. race and partisanship

In SAN JUAN COUNTY'S OBJECTION TO SPECIAL MASTER'S CONCEPTUAL REMEDIAL PLANS Filed 11/17/17 (Case 2:12-cv-00039-RJS-DBP Document 424, pp. 6-7) the County provides a summary statement describing the partisan outcomes of elections in the County, and makes assertions about the partisan affiliations and partisan voting patterns of Native and non-Native American voters. It is not within my purview to discuss the legal implications of these assertions, if any, were they taken to be accurate. Rather, let me be quite clear that partisan considerations played absolutely no role in my line drawing. Since I was using only census data for map drawing purposes, no information about election outcomes or about voter partisanship registrations was contained in the data of which I made use. I would also point out that the School Board elections are non-partisan.

7. Alleged partisan gerrymandering

(a) As I have observed in my Preliminary Report, the size of the County in area, and the stark racial separation we observe within it makes it difficult to avoid some degree of concentration of minority voting strength, since the Navajo Nation, with nearly 78% of the Native American population contained within it, is nearly 98% Native American, with that population

concentrated in the southern part of the County along the Arizona border, while the Northern part of the County is almost entirely white. Native American and non-Native American populations in the County are of a very similar size, with a slight preponderance of Native Americans over non-Hispanic whites. These demographic and geographic realities make it virtually unavoidable, at least without contorted and racially driven line drawing, that one of the three County Commission districts will have a very large Native American majority, and that one of the three County Commission districts will have a very large non-Native American majority, with the third district more racially mixed. Similarly they make it virtually unavoidable, at least without contorted and racially driven line drawing, that two of the five School Board districts will each have a very large Native American majority, and that two of the five School Board districts will each have a very large non-Native American majority, with the fifth district more racially mixed. The problem of mitigating “packing” of minority voters is especially acute for the School Board districts because of their smaller size and the existence in the county of pockets of highly racially homogenous populations.

(b) It is a universally accepted proposition in political science that different racial and ethnic groups face different levels of barriers to full political participation, including limited financial resources, limited education, limited English language fluency, limited access to sources of information such as the Internet, and even limited access to the polls due to transportation issues vis-à-vis going to in-person voting sites or receiving and returning mail-in ballots. It has also always been my view that attempting to assess voting rights claims and to predict the likely outcomes of elections requires an intensely local appraisal.

(c) Given the many barriers to full political participation experienced by Navajos, especially those still resident within the Navajo Nation, districts with equal populations of Native and non-Natives of citizen voting age are not going to be equal in the expected turnout of the two groups, and outcomes will be further influenced by the relative cohesion of Native American and non-Native American voters. This fact is clearly demonstrated by reviewing the outcomes of past county-wide elections involving both a Native American and a non-Native American candidate. In particular, EXPERT WITNESS REPORT OF RICHARD L. ENGSTROM, Ph.D., Filed 08/31/156 Case 2:12-cv-00039-RJS-DBP D, Document 188 at p. 11, looks at the most recent bi-racial contest County-wide, that for Sheriff's office in the 2002 general election, where a Native American candidate, Henry Lee, was a candidate. The 2000 Census reported that the Native American VAP in the county was 52.10 percent. Lee's estimated support among Native Americans voters in the range 78-80.5%; his support among non-Native American voters, on the other hand, was estimated to be in the range 10.5% to 16.9%.¹⁰ Mr. Lee lost, receiving only 40.9 % of the total vote.

(c) In SAN JUAN COUNTY'S OBJECTION TO SPECIAL MASTER'S CONCEPTUAL REMEDIAL PLANS Filed 11/17/17 (Case 2:12-cv-00039-RJS-DBP Document 424, pp. 12-13) the County asserts that putting "non-Navajo voters in greater proportion into a minority number of districts also results in political gerrymandering that does not reflect the overall political make-up of the County as a whole since it guarantees that the Navajo/Democrats with only 52% of the County-wide votes

¹⁰ The slightly different estimates come from different estimation methods, but clearly there is very strong support for the Native American candidate among Native American voters, and very little support for the Native American candidate among non-Native American voters.

will election 2/3 thirds of the officials running for office.”¹¹ I cannot comment on the legal relevance of this claim, but I can address its empirical accuracy. There is simply no evidence in the record to support this claim, since it implies that the outcomes of all elections in the districts in my Conceptual Map C, including the one in the most racially mixed district in the plan, is perfectly predictable in advance (in both racial and partisan terms)¹² and that the predictable outcome in the most racially mixed district in that plan (or its equivalent district in proposed Map CC-D) is the victory of a candidate of choice of the Native American community. Indeed, to the extent that there is evidence bearing on this claim in the record, the claim is wrong.

(d) What is in the record is the assertion of the County’s expert, Kimball Brace, in his deposition that, at 73% Native American CVAP, you have a district safe for a Navajo community candidate of choice.¹³ But Mr. Brace does not do analyses necessary to determine the point at which the Native American population is such that, for some given district, Native Americans have an

¹¹ In the language above the County apparently now acknowledges that Native Americans make up the majority of the County’s (citizen voting age) population.

¹² In arguing that district election outcomes are perfectly predictable based simply on the racial composition of their electorate, the County is implicitly agreeing to the proposition that voting in the County is polarized along racial lines -- at least in partisan contests for the County Commission.

¹³ In Dr. Engstrom’s expert witness report, 2:12-cv-00039-RJS-DBP Document 366-23, Filed 10/12/16, at p. 4 he quotes from the Deposition of Defendant’s Expert Kimball Brace re the proportion of Native American population needed to provide effective voting equality to the Native American community in a Commission district. “Mr. Brace cites [73%] as the level needed “in order to create a district that Native Americans could have – definitely have an ability to elect candidates of their choice” (*Brace Deposition*, at 168).”

“equal” opportunity to elect candidates of choice.¹⁴ Therefore, the claim stated in the COUNTY’S OBJECTION TO SPECIAL MASTER’S CONCEPTUAL REMEDIAL PLANS that a roughly 63.4% Navajo American voting age population --ten percentage points lower than what Mr. Brace identified as a safe seat - is a safe seat for Navajos is not supported by the testimony of the County’s own expert or any other expert witness testimony in the record. Similarly, the 64.4% Native American voting age population in SB3 District 3 is also 9 percentage points below the level that Mr. Brace identifies as a “safe seat.”

(e) The County’s claim that a 65.6% Navajo American district (63.4% Native American CVAP), or even a district that is 64.4% Native American CVAP) is a safe seat for the candidate of choice of the Native American community is further contradicted by the most direct County-specific empirical work bearing on this question, namely Plaintiff’s expert, Richard Engstrom's use of Mr. William Cooper's projection of the County-wide Sheriff's race in 2002 into Plaintiff’s proposed "racially mixed" County Commission district -- District 2 in Plaintiff’s proposed County Commission map.¹⁵ District 2 in Plaintiff’s proposed County Commission map is a district with an even higher Native American population and voting age share than District 3 in my proposed County Commission map D and rather similar in its geographic contours. Based on projecting the votes in the Sheriff's race into Plaintiff’s County Commission District 3, Dr. Engstrom asserts that this 65.9 % Navajo citizen voting age population district is one that the Navajo's candidate of choice loses, roughly 56% to 44%. But then, *a fortiori*, we would expect such projections to

¹⁴ As Mr. Brace notes in his deposition on p. 166, “he wasn’t able to do a complete analysis.”

¹⁵ See Engstrom, REPORT ON DEFENDANT’S REMEDIAL PROPOSALS for NAVAJO NATION V. SAN JUAN COUNTY , Filed 10/12/16 Case 2:12-cv-00039-RJS-DBP Document 366-23, at pp. 7-8.

yield even lower votes for the Navajo candidate of choice in CC Map D District 2 and SB3 District 3, since these have even lower Native American voting age percentage than the 65.9% Native American voting age population in Plaintiff's proposed County Commission District 2.

(f) However, Dr. Engstrom also asserts that, in a different election for a different office, in a district where a candidate of choice of the Native-American community might have a better chance of winning because the district has a higher Native American population, it is plausible to think that there might be higher levels of Navajo turnout. Such higher Native American turnout could, in principle, give a result in the district different from what would be expected based solely on the outcome you get by projecting the results of the Sheriff's race within the district, i.e., different from the otherwise predicted result that, in such a 65.9% Native American voting age district, the Native American candidate of choice would lose. Of course, there might also be higher turnout levels among non-Native voters in such a highly competitive contest as well (a form of counter-mobilization), and that possibility is not really addressed by Dr. Engstrom. I take from Dr. Engstrom's expert witness declaration that, in San Juan County, even a 65.9% Native American citizen voting age district is not a safe seat for the preferred candidate of the Native American community.

(g) The outcomes in a racially mixed "swing" district will depend upon relative turnout and relative cohesion factors, and compelling evidence about those factors simply is not found in the trial record. For these reasons, and taking into account the expert witness testimony in the case summarized above, I conclude that the Native American community is certainly not guaranteed to elect a candidate of choice in the 64.4% Native American voting age population district (District 3) in my proposed SB3 School Board plan (a non-partisan election); and

similarly, the Native American community is certainly not guaranteed to elect a candidate of choice in the 63.4% Native American voting age population district (District 2) in my proposed County Commission plan D (an election for a partisan office).¹⁶ Rather, I regard elections in both districts as competitive ones, and ones in which I would regard the outcomes as too close to call.¹⁷

8. *Incumbency*

¹⁶ I would also note that, in such competitive districts, the presence or absence of contestation by well known /popular incumbents can also influence the outcome of the contest, as can the nature of candidacies in general.

¹⁷ I am aware of the view of the Plaintiff that race conscious adjustment of boundaries in these districts so as to achieve a higher percentage of Native American population is required to avoid potential Section 2 issues. For example, PLAINTIFF'S COMMENTS ON SPECIAL MASTER'S CONCEPTUAL PLANS, filed 11/17/17 Case 2:12-cv-00039-RJS-DBP Document 423, p. 3 observes that "it is not clear that Plan C creates an effective minority-majority District Two, with only a 62.3% AP Indian VAP. In order for Plan C to comply with Section Two, the Indian VAP should be higher." However, although in my view the evidence in the evidentiary record for racially polarized voting in the County is indisputable, because so many elections within the County have been held in racially homogeneous districts without biracial contests, or have been biracial contests where the prospects of victory of the candidate of choice of the minority community have been low, and there is an absence of specific estimates of relative turnout levels of Native American and non-Native American groups in the evidentiary record, I cannot draw firm conclusions about the exact size of the population needed for an effective minority district in which the Native American community has an "equal" opportunity to participate in the electoral process. What I can say is that the level of Native American population in the most racially mixed district I drew in CC-D, and in the most racially mixed district I drew in SB3 are such that election outcomes in these districts are not readily predictable by me based upon my present knowledge, except to say that these are definitely not safe seats for the minority community and its candidate of choice. I would, however, further note that, if there are biracial contests in the most racially mixed districts in SB3 and CC-D in 2018, then close analysis of the actual outcomes of such potentially competitive elections would, in the future, allow for a far better determination of the extent of participation barriers, and of the ability of the minority community to possess an equal opportunity elect candidates of choices as a function of the Native American share of the population in a given district, than what is presently available in the evidentiary record .

(a) The County and the School Board have each expressed a preference for plans that do not pair incumbents. The Plaintiffs have also expressed a preference for plans that preserve incumbency (e.g., School Board Conceptual Plan SB2 over School Board Conceptual Plan SB1, County Commission Conceptual Plan C over County Commission Conceptual Plan B). Judge Shelby's instructions to me were to draw districts that preserved incumbencies if that could be done without violating other higher order constitutional and statutory considerations.

(b) To the best of my present knowledge, the two maps proposed here, County Commission map D and School Board Map SB3, do not pair incumbents. In these proposed maps (CC D and SB3), incumbency considerations in the form of avoiding pairing two incumbents in the same district entered only at the very last stage, and were applied in a fashion that did not affect the plan's fundamental reliance on good government standards¹⁸ and the overriding importance of constitutional standards such as one person, one vote.¹⁹ While there is a slight loss of

¹⁸ Changes in district lines to avoid pairing incumbents did result in small changes in Native American population percentages in some of the districts that needed to be redrawn.

¹⁹ Although the revised proposed County commission and School Boards maps discussed in this Report do not, to the best of my knowledge, pair any incumbents, I should note that, at the November 15, 2017 hearing in Salt Lake City the attorney for the County presented to the Court maps overlaying the boundaries of County Commission Conceptual Maps A, B, and C and School Board Conceptual maps SB1 and SB2, on a map of the County showing roads and other geographic features and present precinct lines, and also showing the names and locations of incumbents. These documents were labeled Defendants' Exhibits 1, 2, 3, 4, and 5 (though they were never, to the best of my knowledge, entered into evidence). I was later given these maps by the Court. The School Board overlay maps provided to the Court by the County at the Salt Lake City hearing wrongly identified two of the five School Board incumbents, listing previous incumbents who had been replaced in the most recent School Board election. It is my understanding that these same misleading School Board maps were displayed at the Monticello Public Hearing at the request of the County, replacing the maps that I had prepared for the Court. At that Monticello Public Hearing there was an inquiry from two members of the School

compactness in plans drawn to prevent incumbency pairings, my view is that this loss is minor and that other features of the plans remain virtually identical in their good government aspects to the conceptual plans in my Preliminary Report from which they were adapted.

9. public hearings and citizen input

(a) As a student of American government and of democracy worldwide, I was deeply impressed by the interest and involvement of ordinary citizens in the rather arcane issue of drawing district boundaries that was reflected by the very substantial attendance at and participation in the Public Hearings in Monticello and Bluff on November 16, 2018, and by the subsequent submission of nearly sixty written comments to the Court. Listening carefully to the comments made at the Public Hearings in Monticello and Bluff, and then reviewing carefully the written comments submitted to the Court website was quite helpful to me in preparing final School Board and County Commission maps to be recommended to the Court. In reviewing these comments, however, necessarily my focus was on those comments that presented what I have in my previous work on redistricting called “feasibly mappable” comments, i.e., suggestions for

Board as to whether I had used the correct School Board incumbencies in the Conceptual Maps I had prepared for the Court. After the conclusion of the formal part of the Hearing, I was able to assure them that, thanks to School Superintendent Ron Nielsen, I had been made aware of the current School Board members. However, the home location of one of these incumbents was initially provided to me only in the form of a Post Office Box, with no street address, and that led to an incorrect geo-coding of her home location. I am indebted to Merri Shumway, current Vice President of the San Juan School Board, and to School Board member Lori Maughan, for providing me with full addresses for all the School Board members at the conclusion of the Monticello Public Hearing. Based on locations in Google maps, the street addresses of all the current School Board members have been geocoded for use in creating SB3.

changes that are sufficiently explicit about how particular pieces of geography should be treated that it is possible to determine if/how they could be implemented.

(b) Many of the comments dealt with legal issues that had already been litigated and resolved, e.g., arguments that a redrawing of lines was not needed, or that elections should be held at-large, or suggesting the impropriety of residents in the Navajo Nation voting in elections for County office, or arguing that the Consent Decree of 1984 rendered the present lawsuit moot. Many dealt with issues not directly relevant to my specifically charged task of drawing a constitutional three district plan for the County Commission and a constitutional five district plan for the School Board, such as proposals to make the Navajo Nation a separate County, or comments about the state of race relations in San Juan County, or about personal experiences of what was characterized as discrimination, or about the degree to which services were reliably and equitably provided to Navajos by the County or by the Navajo Nation, or about the laws affecting taxation on Native American lands; or they made a request for additional public hearings and/or more time for public feedback on proposed maps.²⁰

(c) Also, many of the comments made the same point.

(d) The more general and directly relevant issues raised by the comments, e.g., about incumbent pairings, the division of Blanding, the division of the Navajo Nation and the use of information about Navajo Chapters, the suggested need to adjust upward the Native American percentages in some districts, the continuing need for staggered elections, the use of school

²⁰ I would note that the hearing and comment schedule was an expedited one because of the time pressure of completing revised plans in time for 2018 filing deadlines. As far as I am aware, there were no public hearings held when the County created its remedial plans for the County Commission and School Board.

pupil catchment areas for redistricting purposes, the need to take into account P.O. Box addresses, and the suitability of using 2010 census data for redistricting in 2017, have each been responded to above.²¹

(e) Given the many criteria that need to be addressed in line drawing, it was impossible to simultaneously satisfy all the suggestions proposed by the parties and by citizens of the County.

10. Pursuant to the instructions I receive from the Court, final plans will be created for the County Commission and the School Board to be used in the next election.²²

11. *staggered elections*

Because the boundaries of present districts and proposed districts overlap, it is necessary to have an election for all seats in 2018; to do otherwise would create confusion as to which representative represented which voters. However, because the County makes use of

²¹ There was one other very specific feasibly mappable request in the comments submitted to the Court after the Public Hearing, namely that the area known as the Bayles Ranch, to the northwest of Blanding, be included in the more southwestern of the County Commission districts to whose boundaries it was closest. I believe that CC-D does this.

²² The accompanying shape files can be used by the County to create maps that show roads and other features in addition to cities and census places in a way that will facilitate the process of creating new precinct boundaries, and these maps, when overlaid with the new precinct boundaries, can be used to provide visual cues to voters that will help them locate their home and determine their new precinct assignment.

staggered elections, and these can be justified in good government terms as providing continuity across elections, my recommendation is to retain the staggered feature of elections by holding the 2018 elections for all seats, but to have the duration of remaining office in each district match those for the present districts (with the matching to be determined by present incumbent home location).

12. ERRATA in Grofman Preliminary Report

(a). A portion of the data reported in tabular form for the Plaintiff's County Commission plan In my Preliminary Report was erroneous because data from a different map had inadvertently been copied and pasted. Those typographical errors in my Preliminary Report, did not influence the conclusions reached in that report about the Conceptual maps I was suggesting. Also, I had been examining the correct data about the Plaintiff's County Commission plan in map form. The correct data is shown below.

Plaintiffs' Plan

District	Total Population	Native Am Population	Percent Native Am	Blanding
Northern (District 1)	2851	176	6.2%	0
North-East (District 2)	2851	587	20.6%	1940
Central-East (District 3)	2853	2039	71.5%	1151
South-East (District 4)	2853	2604	91.3%	0
South-West (District 5)	2851	2271	79.7%	183

Based on the mistaken tabulation for the Plaintiff's County Commission plan in my Preliminary Report, I asserted that the highest Native American percentage in any district in Plaintiff's School Board map was 97.7%. The correct percentage (as shown above) is 91.3%

(b) In my Preliminary Report, the assertion was made that Conceptual Map SB2 did not pair any present incumbents. Though that was my intention in creating SB2, that assertion was incorrect. One of the School Board incumbents was incorrectly located in Monticello because the only address we had for her provided by the County was a Post Office Box in Monticello. She actually lives outside of the Monticello city limits. I am indebted to members of the School Board for calling this error to my attention. To the best of my knowledge, the map used in SB3 correctly locates her address. To the best of my knowledge SB3 does not pair any School Board incumbents.

(c) i. In my Preliminary Report, the assertion was made that ten of the twelve schools in the County are racially highly homogenous in student population. The correct statement is that "Nine of the twelve schools in the County have student enrollments that are overwhelmingly Native American or overwhelmingly non-Native American. Three (San Juan High School (SJH), Bluff Elementary (BES), and Albert R. Lyman (ARL)) have a racially mixed student population." The Table reporting the data on which these corrected conclusions are based was contained in my Preliminary Report and the correct statements can be directly read from the data in that table. One of the schools that is racially mixed was wrongly labeled in my Preliminary Report. I am indebted to Superintendent of San Juan Schools Ron Nielson for calling these errors to my attention.

(c) ii. Those typographical errors relating to pupil composition in my Preliminary Report were irrelevant to the map drawing process, since I at no time made use of a standard of proportional representation of different racial groups as a factor in my line drawing choices. The discussion of the racial composition of the schools was contained in my Preliminary Report only because the County's legal and expert witness filings had made a point of inquiry the relative racial preponderance in the County. The data I reported in my Preliminary Report in tabular form demonstrated that the school system student body had a clear Native American preponderance.